REMARKS

The claims are not amended in this response and stand as previously provided with Amendment B.

The Examiner rejected claims 4, 8 and 9 under 35 USC 103(a) as being unpatentable over Kemp '337 in view of Taylor. Applicant respectfully traverses this rejection.

None of the patents relied upon by the Examiner teach or suggest part d of claim 4 or parts b, c and d of claim 8.

Applicant respectfully disagrees with the Examiner's discussion of Kemp '337. Tank 13 is not an oil trap, as suggested by the Examiner. Instead, tank 13 is an accumulator or surge drum (column 2, line 50). Tank 13 is incapable of acting as an oil trap because the evaporator 23 inlet is at the bottom of the tank 13. Instead, the oil trap is located at 29, below the evaporator inlet. This is significant because the float valve 19 relied upon by the Examiner controls the inlet into the accumulator 13 (column 2, lines 51-52), and does not control the outlet from the oil trap. The oil trap has an output line that is controlled by the solenoid valve 37 (column 3, lines 1-7). The solenoid valve 37 is opened at the beginning of each compressor-on operation.

Thus, Kemp '337 teaches that the oil sump is drained in conjunction with the compressor operation. This is different than Applicant's invention,

Taylor teaches a thermal conductivity sensor used to detect hydrocarbons in gas.

Applicant's invention, with its thermal conductivity sensor, is able to distinguish between oil and ammonia. There is no suggestion by Kemp '337 or Taylor to use a thermal conductivity sensor to control either valve 19, 37.

Kemp '337 would not operate with the thermal conductivity sensor replacing the float of valve 19. The float valve 19 has a float sensor that only detects the liquid level in the accumulator. The liquid could be all ammonia or all oil; the float sensor operates the same independently of the type of liquid in the accumulator. In addition, at the inlet location where the thermal conductivity sensor should be located, the liquid should be all ammonia and not oil. This is because the valve 19 is located above the inlet to the evaporator 23. As discussed above, the oil must be located below the evaporator inlet. Thus, Kemp '337 would not operate if modified by Taylor, as proposed by the Examiner.

In addition, replacing the float valve 19 with a valve controlled by a thermal conductivity sensor would still not achieve Applicant's invention. This is because the valve 19 regulates the inlet into the accumulator, not the outlet.

The valve which does control the outlet of the oil sump is the solenoid valve 37. But, there simply is no suggestion to replace the solenoid valve 37, which is controlled by the operation of the compressor, with a valve controlled by a thermal conductivity sensor. Nor is there any suggestion to locate a thermal conductivity sensor in the oil trap 29. Kemp '337 is silent on these teachings.

The Examiner also rejected claims 5-7 under 35 USC 103(a) as being unpatentable over Kemp '337 in view of Taylor and further in view of Kemp '956. As these claims are dependent upon claims 4 and 8, the allowability of which has already been discussed above, Applicant respectfully traverses this rejection.

In view of the foregoing, it is submitted that all of the claims in the application are allowable, and such allowance is respectfully requested.

If any additional fees are required, please charge our deposit account no. 23-2770.

Respectfully submitted,

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